

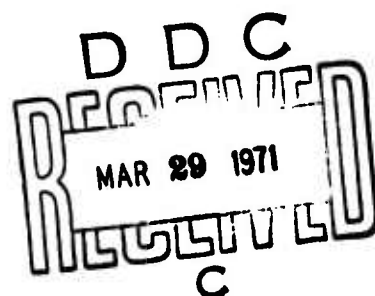
AD720692



NDRI-PR 71-01
10 February 1971

BENEFICIAL COMMUNICATIONS FROM DENTISTS TO PATIENTS

ROBERT G. PISHEL, JR.



NAVAL
DENTAL RESEARCH
INSTITUTE

NAVAL DENTAL RESEARCH INSTITUTE
GREAT LAKES, ILLINOIS 60088

10 February 1971

BENEFICIAL COMMUNICATIONS FROM DENTISTS TO PATIENTS

By

Robert G. Pishel, Jr.

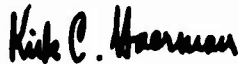
Research Progress NDRI-PR 71-01
Work Unit MR005.20 .01 0317BJA

Bureau of Medicine and Surgery
Department of the Navy
Washington, D. C.

The opinions expressed herein are those of the authors and are not to be construed as reflecting the views of the Navy Department or the Naval Service at large. The use of commercially available products does not imply endorsement of these products or preference to other similar products on the market.

This document has been approved for public release and sale; its distribution is unlimited.

Approved and released by:



KIRK C. HOERMAN
Captain, DC, USN
Commanding Officer

SYNOPSIS

Patient perceptions of dentist communications were shown to be a function of the frequency of beneficial communications which the dentist provided. A lecture concerning communicating with patients was read to dentists in two Navy dental locations and the effects were measured and discussed.

BENEFICIAL COMMUNICATIONS FROM DENTISTS TO PATIENTS

Introduction

Beneficial communications should be a part of good dental treatment. What is said and how it is said greatly influence patient interest in oral health improvement.

In Navy recruit-training centers, the dental visit may be a recruit's first dental experience.¹ Beneficial communications from the Navy dentist to his recruit-patient should establish an active interest in oral health improvement. The dentist may be able to establish this active interest by using available chairtime.

Three dental workshops have proposed that behavioral science research can contribute to dental care delivery.^{2,3,4} An important aspect of dental care delivery is the relationship between actual and perceived dentist-to-patient communication.

This study specifies the communication relationship and reports the effects of a specific communication improvement method. It was hypothesized that patient perceptions of oral health and status information, and genuine interest displayed by the dentist depend on the frequency of the dentist's beneficial communications. Also a positive correlation was predicted for frequencies of beneficial communications that a given dentist provides from one patient to the next. The importance of these hypotheses relates to the implication that patient understanding and active interest will be maximized by the more communicative dentist.

Materials and Methods

Frequency counts of dentist-to-patient beneficial communications were obtained from a group of 18 dentists performing operative dentistry in a dental clinic (Bldg. 1017) at the Naval Base, Great Lakes, Illinois. Specifically, beneficial communications from dentists to patients may provide: establishment of favorable rapport; motivating the patient to understand his dental problems and to accept corrective treatment; and motivating patient oral health care (Fig. 1). Dentists were Navy reserve lieutenants with less than two years of active service. Recruit patients used as subjects, were given dental treatment in order to qualify for Navy submarine and nuclear programs.

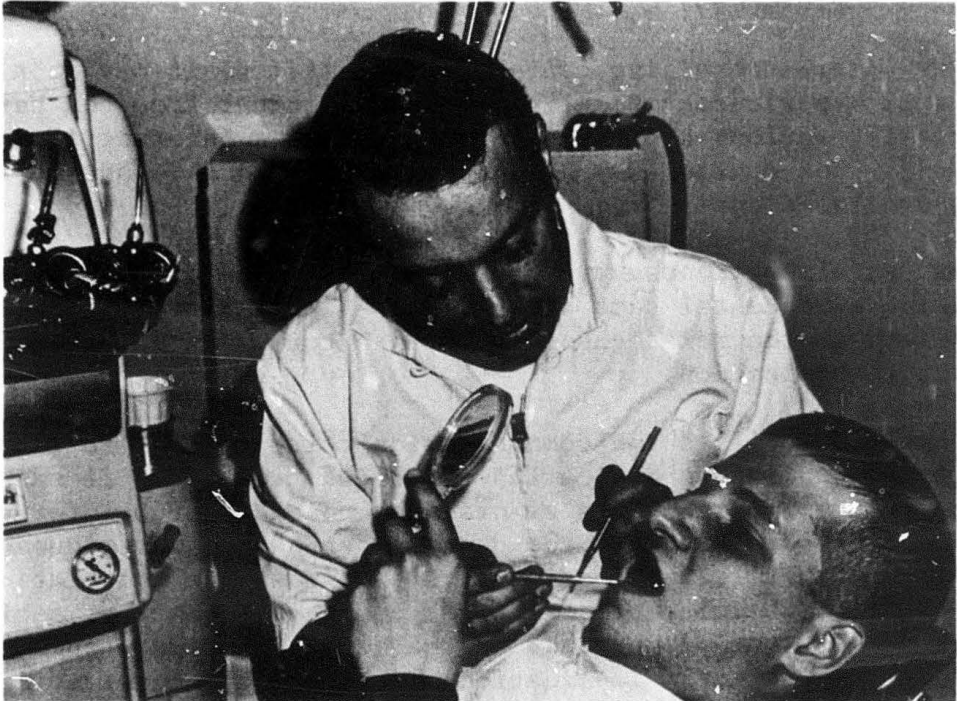
First, frequency data were collected from two groups of 36 patients; a validation group and a cross-validation group, while the investigator was in the operatory. Each patient was treated for a minimum of thirty minutes, and, after treatment, was asked to respond anonymously to two issues on a questionnaire:

1. My dentist, today, told me a lot about taking care of my mouth, teeth, and gums (Information Issue).

LEGENDS

Fig. 1. Motivating Patient Oral Health Care

Fig. 2. After Treatment Response to Patient Questionnaire



2. My dentist seemed really interested in my dental health condition (Interest Issue).

Five choices for response to these issues were available: (1) Strongly agree, (2) Moderately agree, (3) I am not sure, (4) Moderately disagree, and (5) Strongly disagree.

In order to test for investigator effects, response data were also collected for seventy different patients who were treated by the same 18 dentists while the investigator was absent from the operatories.

Chi square analysis was employed to determine if patient responses differed for dentist-to-patient communication frequency variations for the two issues.⁵ The same statistical method tested for investigator effects.

Frequency data were also collected from nineteen dentists at two different occasions in order to test the correlation hypothesis. The Spearman Rank Correlation Method was used to determine if there was demonstrable consistency.⁶

LECTURE EXPERIMENT.--Patient perceptions concerning the two issues were hypothesized to improve after a lecture was presented to dentists delivering care in the clinic environment. The lecture (appendix) explained what beneficial communications are and how the dentist can best provide them to his patients.⁷⁻¹⁸ Immediate participative discussion followed the lecture to maximize retention and probability of improvement.

In addition to Great Lakes, dentists and patients in a similar setting at the Naval Base, San Diego, California (Clinic 3) were studied. Questionnaires containing the same issues were administered to the recruit-patients used as subjects.

Control group data were collected from patients at both locations. At Great Lakes two groups of twenty-five subjects were compared and at San Diego two groups of twenty-two subjects were compared.

For experimental groups, questionnaires were given to seventy patients at Great Lakes and to forty-four patients at San Diego before dentists had received the lecture. After the lecture, questionnaires were given to forty-eight patients at Great Lakes and thirty-eight patients at San Diego. Before-lecture versus after-lecture comparisons were made for both locations. Before-lecture data from Great Lakes were also compared with before-lecture data from San Diego. Finally, after-lecture data from Great Lakes were compared with after-lecture data from San Diego.

Results - DENTIST-TO-PATIENT COMMUNICATIONS. -- Validation and cross-validation group results for the combined two issues relative to above or below the median dentist-communications yielded $p < .05$ and $p < .01$

respectively. A definite difference was found between the responses of patients whose dentists beneficially communicated above and below the median for both groups. Thus patient perceptions of dentist communications are a function of the frequency of beneficial communications.

There was an investigator effect demonstrated regarding the Information Issue; $p < .001$, and the Interest Issue; $p < .05$. Therefore, when the investigator was absent from the operatory, patient perceptions of beneficial communications and perceived genuine interest were significantly reduced.

The correlation or consistency hypothesis was also confirmed; $p < .02$.

LECTURE EXPERIMENT--Any after-lecture differences may be considered due to effects produced by the lecture for each location, since no differences were found between control groups at either location.

Table 1 shows before-versus after-lecture results for Great Lakes and San Diego. Results for the information issue indicate that the lecture increased the frequency of beneficial communications at Great Lakes as measured by patient perceptions. However, no increase in genuine interest was perceived. Results for the information issue only approached significance at San Diego; $.05 < p < .10$. However, it may be concluded that some motivational effect occurred. No increase in genuine interest was perceived.

Table 2 shows the Great Lakes versus San Diego results before and after the lecture. Before the lecture, more transmitted information was perceived by patients at San Diego than Great Lakes. No difference was found in patient perceptions of genuine interest. After the lecture, the information issue continued to show a difference in favor of San Diego and patient perceptions of genuine interest, slightly favored San Diego; $.05 < p < .06$.

DISCUSSION

DENTIST-TO-PATIENT COMMUNICATIONS.--Since a relationship exists between actual and perceived dentist-to-patient communication, it is important for all practitioners to maximize beneficial communications toward patient understanding and active interest in oral health.

The investigator effect demonstrated the need for improved dentist motivation with respect to dentist-to-patient communication in the recruit dental setting. It should be realized that motivation assessment can contribute to increased professionalism, for every dental setting.

The validation of the correlation hypothesis indicated that the individual dentist may be establishing either good or poor communication habits with respect to his patients. Dentists who become habitually less communicative will have to exert considerable effort to modify such

practices, since behavioral routine, once conditioned, resists change. It is critical that dentists develop good communicative habits at the inception of actual practice.

LECTURE EXPERIMENT.--Greater behavioral commitment will be required to improve dentist motivation and communication beyond the lecture effect. People are more effectively motivated when permitted some degree of participation in the determination of their own activity.¹⁹ Well-liked and respected peer dentists who have learned the importance communication skills play in dental care delivery can function through discussion groups to motivate other dentists.

Differences as a function of setting location suggest that the particular environmental conditions decisively affect the frequency of dentist communications. Future research should consider the influence of dental curricular variation, geographic location, operatory design, and environmental conditions related to need satisfactions of dentists. Such studies can aid practitioners and dental educators to enhance the level of dental professionalism.

CONCLUSIONS

Patient perceptions of dentist communication were found to depend on the frequency of beneficial communications. There was also a positive correlation for frequencies of beneficial communications that a given dentist provides from one patient to the next.

Patient perceptions about oral health and status information improved after a lecture concerning communicating with patients was presented to dentists at Great Lakes. Results also approached significance at San Diego. Dentist communications perceived by patients favored San Diego when compared to Great Lakes both before and after the lecture.

Results demonstrate the need for greater dentist motivation toward further development of their communicative skills. Peer group discussions may improve motivation and communication. Future research should consider the influence of dental curricular variation, geographic location, operatory design, and environmental conditions related to need satisfactions of dentists.

Table 1
BEFORE VERSUS AFTER LECTURE RESULTS

Issue	Great Lakes Sig. Level	San Diego Sig. Level
1 Information	$\leq .05$	(NS)
2 Interest	NS	NS

Table 2
GREAT LAKES VERSUS SAN DIEGO
BEFORE AND AFTER LECTURE RESULTS

Issue	Before Lecture Sig. Level	After Lecture Sig. Level
1 Information	$\leq .001$	$\leq .01$
2 Interest	NS	(NS)

REFERENCES

1. Rovelstad, G.; Irons, R.; McGonnel, J.; Hackman, R.; Collevicchio, E.: Survey of Dental Health of the Naval Recruit. Dental Research Laboratory, Bainbridge, Maryland, Research Report NM 75 01 26.04.02 pp. 3, 21, 1958.
2. Workshop on Enhancing the Image of Dentistry, J Amer Coll Dent 32: 209, 226-229, 262, 1965.
3. Workshop on Dental Manpower Needs in the 1970's, J Amer Coll Dent 35-2: 188-194, 207, 226-227, 1968.
4. Rovelstad, G.; Hoerman, K.; Keene, H.; Sharrow, B.; Pishel, R.: Workshop on Naval and Marine Corps Recruit Dental Programs. Naval Dental Research Institute, PR 69-09, 27-29, 37-38, 1969.
5. Batson, H. C.: An Introduction to Statistics in the Medical Sciences. Minnesota: Burgess Publishing Co., 1956, p. 44.
6. Siegel, S.: Nonparametric Statistics. New York: McGraw-Hill, 1956, pp. 202-203, 249, 284.
7. Enelow, A.: Psychotherapy in the Practice of Medicine, USN Medical News Letter 54: 1-5, 1969.
8. Bregstein, S.: Psychologic Aspects of Dental Practice, J Am Soc Psychosomatic Den and Med 4: 57-60, 1957.
9. Hammerman, S.: Some Psychiatric Aspects of Management of the Dental Patient, Dent Abs 1: 144, 1956.
10. Markstein, D.: How to Handle the Angry Patient, Oral Hyg 40: 52-54, 1950.
11. American Dental Association - Bureau of Economic Research and Statistics. A Motivational Study of Dental Care, J A D A 57: 279, 1958.
12. Garleb, C.: Why People Postpone Dentistry, Oral Hyg 40: 1288-1291, 1950.
13. Personal Interest, Fort Rev Chicago D Soc 26: 7, 1953.
14. Hayes, H.: Human Interest at the Chairside, J Amer Coll Dent 26: 316-320, 1959.
15. Askey, H.: Listening Chair, J Kansas City Dist Dent Soc 29: 11-16, 1953.

16. Richardson, F.: Fear - A Dental Problem, Oral Hyg 26: 346-353, 1936.
17. Tortora, A.: Art of Effective Dental Treatment. The Human Side of Dentistry, NY State Dent J 27: 89-92, 1961.
18. Moser, R.: More -- On Speaking to Patients, USN Medical News Letter 54: 18-22, 1969.
19. Gilmer, B. H.: Industrial Psychology. New York: McGraw-Hill, 1966, pp. 331-332.

Appendix

COMMUNICATING WITH PATIENTS IN THE NAVY DENTAL SETTING

Communication with patients can be a powerful means to improve health and reduce discomfort. Patients need to receive help in gaining the feeling of well-being. This is especially true when anxiety is high(7). Many patients and most recruit-patients have had very little experience with dentists and dental treatment. Therefore, most of these patients experience some anxiety due to fear of the unknown. They need reassurance through the doctor's expression of understanding.

The dentist must be alert to evidence of anxieties which are out of proportion with the situation. Some patient's behavior may relate to factors with origins rooted in the past. Examples are:

1. Recollections of unfavorable dental experiences,
2. Pain associated with previous treatment,
3. Fear of similar unpleasant experiences,
4. Lack of choice in the Navy dental visitation,
5. Undue preoccupation with oral functions, and
6. Other general fears with conditioned responses re-elicited by this confrontation.

A difficult patient usually may be handled by allowing him to air his feelings to you as a sympathetic listener and by your use of positive suggestions in treatment (8). Such techniques as reassurance and encouragement may help to allay anxiety (9). In allaying anxiety it is important to first explain what is necessary to be done, then, how it will be done. After this is accomplished, the work should be completed and further explained if anything is left unclear. If the patient becomes angry and ego-defensive, the dentist should:

1. Convince the patient that he does not want to argue,
2. Listen carefully to the patient until he has finished,
3. Look at the question from the patient's point of view,
4. Try the "Yes.....but" trick,
5. Look for a point of agreement, and
6. Work out a settlement on the spot (10).

Even in the many cases where this fear experience is not appreciably shown in the patient's overt behavior, the content of communication between the dentist and the patient is of great importance. What the dentist says and more important, the way he says it, are observed by the patient. How the doctor behaves in the operatory with respect to his instruments, his procedures, and his technician are all observed and evaluated by the patient in terms of his expectations about dental care. Of great importance are the underlying emotionally-toned factors. These factors, such as the meanings teeth and dental care have for the patient, can operate as anchors for evaluations and attitude development (11).

Professional profile is perceived by patients whether it is in the Navy setting or in a private practice. The Navy setting in which you are now working may be viewed as a time during which satisfactory communication habits may be established. Regardless of the nature of these habits, they will have a tendency to remain over time in the form of communication behavior patterns. Any habit once established incurs an inertia of its own. Although it takes less energy to repeat the behavior, because of practice, it would require considerable mental energy to change the habit.

Good dentist-to-patient communication should be a part of good dental treatment. It is extremely important that the patient be made aware not only of what his current dental problems are, but also, what he should do in the future to maintain good oral hygiene once his oral condition has been restored to class one status. Prevention of carelessness and procrastination with respect to return visits must be suitably emphasized (12).

Here, the dentist represents an important figure to the recruit-patient. Therefore, his advice should be listened to and remembered. The dentist's best endeavor to contribute to reduction of oral disease incidence should improve patient interest and provide a feeling of real accomplishment. Such feelings of satisfaction are resultant from exercising professional responsibility and personal interest (13).

Some goals for the dentist might advisedly be to achieve verbal expression from his patient with respect to:

1. Questions related to the patient's dental condition,
2. What the patient should do to maintain and improve good dental health,
3. Requests for return visits if applicable, and
4. Simple expressions of gratitude for the dentist's personal concern and kindness.

Such objectives can be accomplished if the dentist's respect for his patient is perceived and if he truly makes the effort to decide what is best for each patient (14).

Several recommendations for exercising the best professional bearing and providing the most beneficial kinds of communication to your patients may be useful:

1. Always regard the patient as a person for he is the most concerned if not interested participant and needs your services and abilities.
2. All comments made in the operatory should be conducted with the listening patient in mind. Disagreements, demeanings, and variances of opinion should not be discussed in front of the patient.
3. The patient should never be depreciated or embarrassed.
4. The patient should not be alarmed by conversation or perplexing terminology meant to explain his condition.
5. Previously performed dentistry should not be deprecated.
6. Communication which benefits the patient should be provided; for example:
 - a. Discussion of preventive practices,
 - b. Dietary control information,
 - c. Counseling in caries control and gingival care,
 - d. Expression of personal interest by the dentist in the individual patient's case (15).
 - e. Enlightenment about the patient's oral condition and the appropriate treatment,
 - f. Appeals through emotionally positive motives, such as, good looks, comfort, and convenience (16). Emotions are powerful forces and if taken into account by the dentist, they can better serve the patient (17).

If a meaningful increase in the beneficial communications occurs in the dental operatory, then it may be anticipated that patients will exhibit less anxiety during future dental treatment. It may also be expected that they will develop a realization of the importance and an appreciation of their dental services that you provide.

Remembering that the chairtime available is perhaps the most effective time for dental health education, it should be appropriately used for the purpose of expressing the above recommendations. In summarizing how to speak with patients, a paraphrase of the Golden Rule is most fitting: "Treat your patient as you would like to be treated yourself" (18).

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D		
(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)		
1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION
Naval Dental Research Institute Great Lakes, Illinois		UNCLASSIFIED
		2b. GROUP
		5200.10
3. REPORT TITLE		
BENEFICIAL COMMUNICATIONS FROM DENTISTS TO PATIENTS		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)		
Progress		
5. AUTHOR(S) (First name, middle initial, last name)		
Robert G. Pishel, Jr. LT, USN		
6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
10 February 1971	11	19
8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO. 71-01		
c.	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d. MR005.20.01 0317BJA		
10. DISTRIBUTION STATEMENT		
Distribution of this document is unlimited		
11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY	
NA	Naval Dental Research Institute USNTC Bldg. 600 Great Lakes, Illinois 60088	
13. ABSTRACT		
<p>Dentist to patient communications are important, since it is this communication which can induce the patient to establish an interest in his dental health. Generation of active personal interest in dental health among naval personnel and implementation of good oral health habits can save many costly hours in dental care delivery.</p> <p>Recruit dental clinics and personnel assigned to them were studied. Frequency counts of communications in the dental operatory provided measures of dentist to patient information transmissions. Attitude questionnaires measured the communication effect as perceived by patients. An indoctrination lecture was presented to dentists in order to improve beneficial communications.</p> <p>Findings demonstrated that there is a definite relationship between actual frequency of communications and the recruit patient perceptions related to dental health. Patient perceptions about oral health information improved after a lecture was given to dental personnel. This finding suggests that the presentation of a standardized lecture pointing-up the need for frequent and beneficial communication between dental personnel and patients can be useful in improving the attitudes toward maintenance of personal dental health.</p>		

DD FORM 1473

1 NOV 65

(PAGE 1)

S/N 0101-807-6801

Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Behavioral Sciences Communication Dental Operatory Recurit-Patient Environmental Conditions						